

Rock Island Arsenal
A-C Connection
(Building 103)
Rodman Avenue and First Street
Rock Island
Rock Island County
Illinois

HAER No. IL-20-S

HAER
ILL,
81-ROCIL,
3/103-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
Department of the Interior
Washington, D.C. 20013-7127

HISTORIC AMERICAN ENGINEERING RECORD

HAER
ILL,
81-ROCK
3/103-

ROCK ISLAND ARSENAL

A-C CONNECTION

(Building 103)

HAER No. IL-20S

Location: Rodman Avenue and First Street,
Rock Island Arsenal,
Rock Island,
Rock Island County, Illinois
UTM: 15.704780.4598870
Quad: Davenport East

Date of Construction: 1917-1918

Present Owner and Occupant: U.S. Army

Present Use: Administrative offices

Significance: Although Rock Island Arsenal was designated an ordnance manufacturing installation during the Civil War, it was not until World War I that all of the stone Greek Revival shops on Rodman Avenue were fully outfitted with production machinery. To facilitate material handling between the shops, the arsenal command in 1917-1918 authorized the construction of four connecting links that matched the architectural detailing of the older buildings. The B-D Connection joined Shops B and D (see HAER Nos. IL-20F, IL-20G). Part of the Rock Island Arsenal National Register Historic District, the building embodied an equal concern for utilitarian and aesthetic considerations that became increasingly rare during subsequent wartime construction programs.

Historian: Jeffrey A. Hess, February 1985

Architectural Historian: David Arbogast, February 1985

PART I. HISTORICAL INFORMATION

A. Physical History:

1. Date of erection: According to the arsenal's official Completion Report for World-War-I construction, the "A- C Connection [was] started 11-23-17, completed 7-14-18" (p. 3).
2. Architect: Stone and Webster Company of Boston (Completion Report, p. 3).
3. Original and subsequent owners: U.S. Army.
4. Builder, contractor, supplier: Stone and Webster Company served as general contractor (Completion Report, p. 3). Much of the stone came from demolished portions of Shops A and C (Interview with Bouilly).
5. Original plans and construction: The Rock Island Arsenal Engineering Plans and Services Division has microfiche copies of original elevations prepared by Stone and Webster in 1917. The drawing for the north elevation shows a three-story, seven-bay facade connecting original single bays of the pavillions of Shops A and C. The original construction is documented by a 1944 photograph in the picture collection of the Rock Island Arsenal Historical Office, captioned "69 / Looking south at Shop 'A-C' Annex, Building #103 / 21 November 1944" (see HAER No. IL-20S-3). The present configuration of the north facade conforms to the original construction plan.

The drawing for the south elevation shows a four-story, seven-bay facade connecting original single bays of the pavilions of Shops A and C. The fourth story contains an entablature, with a pair of small windows defining each bay. On the second and third stories, the bays are defined by pilasters, which frame a tall window space extending a full two stories in height. On the ground floor, three regularly spaced, single window openings to the east and west flank a central bay, which is not detailed in the drawing. Early photographs documenting the original construction have not been located. But a 1956 photograph (see HAER No. IL-20T-5) of an identically designed building connecting Shops G and I indicates that the south facade of Connection A-C was constructed according to the details articulated in the 1917 elevation. According to the 1956 photograph, the tall, two-story window openings originally contained industrial steel sash. At present, the facade does not conform to the original construction plan. The ground-floor level forms the rear facade of a

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one-story structure that infills the courtyard between Shops A and C. In addition, the steel sash of the second and third stories has been replaced by concrete block and irregularly spaced, aluminum sash.

6. Alterations and additions: In 1943, the ground-floor level of the south facade was incorporated into the rear facade of a one-story structure infilling the courtyard between Shops A and C; the new structure was designated as "Building 107" ("Real Property Inventory," p. 6).

About 1979, the industrial steel sash of the north facade was infilled with concrete block and irregularly spaced, aluminum sash (Interview with Bouilly).

B. Historical Context:

In 1917, the arsenal command authorized the construction of connecting links between four pairs of nineteenth-century manufacturing shops on Rodman Avenue. Designed and built by Stone and Webster Company of Boston, the four new buildings displayed the same stone, Greek Revival architecture of the older structures (see also HAER Nos. IL-20Q, IL-20R, IL-20T). Completed in 1918, Building A-C joined Shops A and C. Originally used for storage and shop space, the building currently houses administrative offices. It has been designated as "Building 103" at least since World War II (see HAER Photo No. IL-20S-3; for additional documentation, see HAER No. IL-20).

Prepared by: Jeffrey A. Hess
MacDonald and Mack Partnership
February 1985

PART II. ARCHITECTURAL INFORMATION

A. General Statement:

1. Architectural character: The building is a late Greek Revival style, rectangular, limestone building with elevations salvaged from the adjacent pavilions of Buildings 102 and 104. As a result, its exterior detailing matches those buildings, although its interior reflects its later construction date. It is two-and-one-half stories tall with a full basement and a gabled roof sheltering an attic. Serving as one of four similar connecting links for the ten stone shops, it effectively recedes into the background of its more illustrious neighbor.

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2. Condition of fabric: The building is well-maintained and is in good condition.

B. Description of Exterior:

1. Overall dimensions: The rectangular building measures 90' (7 bays on its north and south elevations) x 55'. It is two-and-one-half stories tall with a full basement and attic.
2. Foundations: Poured, reinforced concrete foundations carry a dressed ashlar limestone water table.
3. Walls: The south elevation (HAER Photo No. IL-20S-1) is reinforced concrete with rock-faced ashlar limestone veneer salvaged from the adjoining pavilions of Buildings 102 and 104. The north elevation is painted concrete block. Colossal rock-faced ashlar limestone pilasters rising from the water table to the entablature divide both elevations into a regular bay system. The dressed limestone entablature carries a projecting cornice (originally dressed limestone) of tan fiberglass simulating limestone.
4. Structural systems: The bearing walls are reinforced concrete on the south, concrete block on the north, and brick on the east and west. The basement, first, and second floors contain reinforced concrete piers (HAER Photo No. IL-20S-2) 20' on-center. The attic contains steel H-columns. First, second, and attic floor systems are poured, reinforced concrete. The roof system is steel beams.
5. Porches: A porch (HAER Photo No. IL-20S-1) is centered in the north elevation. It is quite simple, being reinforced concrete with plain steel pipe railings painted black.
6. Light wells: Across the north elevation (HAER Photo No. IL-20S-1) there is a narrow window well with rock-faced ashlar limestone walls to grade and a black steel pipe railing above grade.
7. Openings:
 - a. Doorways: The principal doorway (HAER Photo No. IL-20S-1) is located at the porch and contains a rock-faced limestone segmental-arched head with a rock-faced keystone, rock-faced limestone jambs, and a poured concrete sill. The doorway opening contains a single modern slab door with single glass upper panel, with a transom and sidelights.
 - b. Windows: Typical first- and second-floor north elevation window openings (HAER Photo No. IL-20S-1) contain six-over-six, double-hung, wood sash and have rock-faced limestone jambs, cut limestone sills and flat lintels. These window sash match

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the original sash of Buildings 102 and 104. The first- and second-floor south elevation window openings contain small, three-light aluminum combination sash irregularly located across the elevation. The attic window openings (HAER Photo No. IL-20S-1) contain single-light, pivoting, wood sash and rock-faced limestone jambs and sills and lintels formed by the entablature and frieze and arranged in pairs. The basement window openings (HAER Photo No. IL-20S-1) typically contain six-over-six, double-hung, wood sash, and have rock-faced limestone jambs, lintels formed by the water table, and flat dressed limestone sill blocks. Some of the south basement window openings have been filled with brick and others with glass block. All wood sash are painted white.

8. Roof:

- a. Shape, covering: The roof is a gable form covered with asphalt shingles.
- b. Cornice, eaves: The cornice and eaves (HAER Photo No. IL-20S-1) are fiberglass painted tan to simulate the original limestone cornice and eaves. The interior metal gutter system is tied to exterior metal leaders which lead to an underground drainage system.
- c. Ventilators: Equally spaced along the roof ridge is a pair of large sheet metal ventilators (HAER Photo No. IL-20S-1).

9. Ancillary structures: Building 107, the Laborstory, extends south of the building, entirely filling the courtyard area. Although it may have been a laboratory at one time, it is now used for various functions, including a shoe store, active storage, mechanical equipment, and offices. The building has a flat roof with a very wide monitor to enable it to abut the adjacent walls below their first-floor windows. Its north, east, and west walls are formed by the adjacent exterior limestone walls of the buildings. The former basement window openings in these walls have been filled primarily with glass block, with a minority filled with brick. The regular east and west window openings of the monitor are also filled with glass block. The south wall is a reinforced concrete bearing wall. At irregular locations in it are two overhead doors, two wood pedestrian doors, a window opening containing glass block and two small aluminum sash, and a steel ladder at the east end to the roof. The building has a structural bay system with five bays east to west, of which the center three bays support the monitor roof, and ten bays north to south. The bays are divided by square concrete piers.

C. Description of Interior:

1. Floor plans: Although the building has two stories with a basement and an attic, it has no stairs or elevators. Access between floors is provided via adjacent stairs in the adjoining pavilions of Buildings 102 and 104.

a. Basement: The basement is an open plan area.

b. First floor: The first floor contains a center hallway flanked by rooms.

c. Second floor: The second floor has an open plan with some enclosed offices.

d. Attic: The attic is an open plan area.

2. Flooring: Basement flooring is poured concrete with a sealer applied to it. The first floor (HAER Photo No. IL-20S-2) has poured concrete flooring covered with linoleum tile. The second floor has wood flooring covered with linoleum tile. The attic has wood flooring.

3. Wall and ceiling finishes: Outer basement walls are painted rock-faced ashlar limestone on the north elevation, painted concrete block on the south elevation, and painted brick on the east and west elevations. The reinforced concrete piers are painted. Interior partition walls are wire cage. The ceiling is exposed and painted reinforced concrete beams and slab.

Outer first- and second-floor walls are painted rock-faced limestone on the north elevation, painted concrete block on the south elevation, and painted brick on the east and west elevations. The concrete piers (HAER Photo No. IL-20S-2) are painted. Interior partitions are painted plaster and demountable partitions (HAER Photo No. IL-20S-2). The ceilings (HAER Photo No. IL-20S-2) are suspended, acoustical tile on the first floor and painted structural concrete on the second floor.

The outer attic walls are unpainted rock-faced ashlar limestone on the north and south elevations and unpainted brick on the east and west elevations. The ceiling is the exposed board roof sheathing and rafters and purlins.

4. Openings:

a. Doorways and doors: All doorways are of relatively recent vintage appropriate to their respective partitions.

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- b. Windows: There are no window casings. Window openings are formed by the adjacent masonry.
- 5. Hardware: No known original hardware, other than window sash cords, pulleys, weights, and ornate lifts, is known to survive.
- 6. Mechanical equipment:
 - a. Heating, air conditioning, ventilation: The building is heated by steam radiators from a central heating plant (Building 227). There is no air conditioning. Ventilation is by freestanding and wall- and pier-mounted electric fans (HAER Photo No. IL-20S-2).
 - b. Lighting: Artificial illumination is by means of fluorescent electrical fixtures (HAER Photo No. IL-20S-2) on the basement, first, and second floors and by incandescent fixtures in the attic. No evidence remains of original artificial lighting systems.

D. Site:

General setting and orientation: Connecting Buildings 102 and 104, both administration buildings, the building is centered between Gillespie Avenue on the west and Second Avenue to the east and lies south of Rodman Avenue, the arsenal's principal street. To the south, filling the courtyard between all three buildings, lies Building 107, a laboratory, south of which is South Avenue. The relatively level site slopes gently to the south.

Prepared by: David Arbogast
Architectural Conservator
February 1985

PART III. SOURCES OF INFORMATION

A. Original Architectural Drawings:

Microfiche copies of the following drawings are on file at the Rock Island Arsenal Engineering Plans and Services Division:

Stone and Webster, "Cut Stone Details / Sheet No. 1 / North Elevation Building A-C," December 12, 1917, microfiche R20000382; shows original construction plan.

Stone and Webster, "Cut Stone Details / Sheet No. 2 / South Elevation Building A-C," December 12, 1917, microfiche R20000381; shows original construction plan.

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B. Early Views:

The picture collection of the Rock Island Arsenal Historical Office has a 1944 photograph documenting the original construction of the north facade. It is captioned "69 / Looking south at Shop 'A-C' Annex, Building #103 / 21 November 1944." (see HAER Photo No. IL-20S-3)

C. Interviews:

Robert Bouilly, Senior Historian, Rock Island Arsenal Historical Office, May 30, 1984; noted the reuse of stone from demolished portions of Shops A and C, and provided approximate date for alteration of south facade.

D. Bibliography:

1. Primary and unpublished sources:

Hess, Jeffrey A., and Mack, Robert C. "Historic Properties Report Rock Island Arsenal, Rock Island, Illinois". Prepared by MacDonald and Mack Partnership, and Building Technology Incorporated for the Historic American Buildings Survey/Historic American Engineering Record, National Park Service, U.S. Department of the Interior, 1985. The report, with accompanying inventory cards, is filed as field records in the Prints and Photographs Division, Library of Congress, under HAER No. IL-20.

Real Property Cards. Rock Island Arsenal Engineering Plans and Services Division. Briefly describes building's structural characteristics and maintenance history.

"Real Property Inventory," computer printout, March 31, 1982. Rock Island Engineering Plans and Services Division. Gives construction date for Building 107.

2. Secondary and published sources:

Completion Report Covering All Construction Projects Accomplished Under Supervision of the Construction Division, U.S. Army at Rock Island Arsenal. N. pl.: n. pub., 1922. Rock Island Arsenal Historical Office. Describes planning and construction of building.

War's Greatest Workshop Rock Island Arsenal. N. pl.: Arsenal Publishing Co. of the Tri-Cities, 1922. Rock Island Arsenal

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Historical Office. Describes planning and construction of the building.

PART IV. PROJECT INFORMATION

This project was part of a program initiated through a memorandum of agreement between the National Park Service and the U.S. Department of the Army. Stanley J. Fried, Chief, Real Estate Branch of Headquarters DARCOM, and Dr. Robert J. Kapsch, Chief of the Historic American Buildings Survey/Historic American Engineering Record, were program directors. Sally Kress Tompkins of HABS/HAER was program manager, and Robie S. Lange of HABS/HAER was project manager. Building Technology Incorporated, Silver Spring, Maryland, under the direction of William A. Brenner, acted as primary contractor, and MacDonald and Mack Partnership, Minneapolis, was a major subcontractor. The project included a survey of historic properties at Rock Island Arsenal, as well as preparation of an historic properties report and HABS/HAER documentation for 38 buildings. The survey, report, and documentation were completed by Jeffrey A. Hess, historian, Minneapolis; Barbara E. Hightower, historian, Minneapolis; David Arbogast, architectural historian, Iowa City, Iowa; and Robert C. Mack, architect, Minneapolis. The photographs were taken by Robert A. Ryan, J Ceronie, and Bruce A. Harms of Dennett, Muessig, Ryan, and Associates, Ltd., Iowa City, Iowa. Drawings were produced by John Palmer Low, Minneapolis.